

AI-1110

Stereo Amplifier

Specifications

MINIMUM CONTINUOUS AVERAGE POWER OUTPUT PER CH, both channels driven with no more than 0.2% THD. at 8 ohms, 1KHz.....53W at 8 ohms, 40-20,000 Hz..... 50W INTERMODULATION DISTORTION, 60 Hz:7KHz=4:1 SMPTE 50W ourput into 8 ohms....0.2% DAMPING FACTOR at 1 KHz, 8 ohms......... 50 INPUT SENSITIVITY for 50w output, 8 ohms at 1KHz AUX/TUNER......150mV PHONO PREAMP INPUT OVERLOAD at 1KHz, 0.1% THD 150mV PHONO, RIAA 40-20,000Hz ±0,5dB AUX at 1W, -3dB......5Hz-50KHz LOUDNESS CONTOUR at 10KHz.....+3dB TONE CONTROL BASS at 100Hz ± 10dB TREBLE at 10KHz..... ± 10dB CHANNEL SEPARATION at AUX 100Hz......50dB 1KHz...., 45dB



Note: Design and specifications subject to change withou notice for improvements.

WEIGHT......5.6kg

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Electrical Parts List

MAIN BOARD 4002117200

Ref. No.	Parts No.	Description	Position	Version
• IC IC101	2168220104	AC NJM 4558DD	1A	
• TRANSI		004 7000		
	2008015700		2B	
Q303L/T	2008606107	KTC 22291	2B	
Q304L/R	2028406120 2028106107	KTA 005V	2C	
COOK / P	2028106107	20C 20E4	2C, 2D 2C, 2F	
0300L/ R	2028220104	25C 3604 3CA 1400	2D, 2E	
030717 11	2008609101	MPS A05	2E, 2E	
0901	2008609101	MAPS AOS	2E	
0902L/R	2008610102	2SD 1302S	2B	
0903	2028406121	KTD 1406	2E	
	2208206105		2F, 2E	
• DIODES	;			
	2258106100	1N 4002	2D	
	2258106100	1N 4002	2D	
D303	2058599112	Zener RD 20BM	2E	
D901	2050100105	DECT 1N E400	2F	
D902	2058100105	RECT 1N 5402	3F	
D902 D903 D904	2058100105	RECT 1N 5402	3F	
D904	2058100105	RECT IN 5402 RECT IN 5402 RECT IN 5402 RECT IN 5402	3F	
D905	2258106100	1N 4002	3F	
D906	2258106100	1N 4002	3F	
D906 D907 D908	2258106100	1N 4002	3F	
D908		Zener RD15BM	3F	
D910 D911	2058599109	Zener RD15BM Zener RD15BM	3E	
		and the second second		
◆ COILS L101L/R	2648601470	Inductor 50µH	1A	D
L501L/R	2648001010		D3, E3	-
• RESIST	ORS			
R101L/R	3069102970	C.F 1K ohm 1/5WJ	1A	
R102L/R	3069104970	C.F. 100K ohm ½W.1	1A	
R104L/R	3069153970	C.F 15K ohm 1/5WJ	2A	
R105L/R	3069561970	C.F 15K ohm ½WJ C.F 560 ohm ½WJ C.F 43K ohm ½WJ C.F 1K ohm ½WJ C.F 470 ohm ½WJ	1A	
R106L/R	3069433970	C.F 43K ohm 1/5WJ	2A	
R107L/R	3069102970	C.F 1K ohm 1/5WJ	1A	
R108L/R	3069471970	C.F 470 ahm 1/5WJ	2A	
R109L/R	3069104970	C.F 100K ohm 1/5WJ	2A	
R110	3069101970	C.F 100 ohm 1/5WJ	2A	
R111	3069103970	C.F 10K ohm 15WJ	2A	
R112	3069103970	C.F 10K ohm ½WJ	2A	
H113L/R	3069102970	C.F 100 ohm ½WJ C.F 100 ohm ½WJ C.F 10K ohm ½WJ C.F 10K ohm ½WJ C.F 1K ohm ½WJ	1A	
K114L/R	3069102970	C.F IK Ohm %WJ	1A	
H115L/H	3069102970	C.F. IK ohm 1/W	1A	
K116L/R	3069102970	C.F. 1K ohm 1/W/	1B	
N I I /L/ H	3069102970	C.F. IK ODM 1/5WJ	1B 1B	
D12/IL/P	3069102970	C.F 1K ohm 1/5WJ C.F 47K ohm 1/5WJ	3B	
B126L/R	3069562970	C F 5 6K ohm 1/2W.I	3B	
R1271 / P	3069102970	C.F 5.6K ohm 1/2WJ C.F 1K ohm 1/2WJ C.F 1.5K ohm 1/2WJ	3B	
R300L/R	3069152970	C.F 1.5K ohm ½W.I	2B	
R301L/R	3069153970	C.F 150K ohm 1/5WJ	2B	
		C.F 1K ohm 1/5WJ	2B	
R303L/R	0000400000	C.F 18K ohm 1/5WJ	2B	
R304L/R	3069122970	C.F 1.2K ohm 1/5WJ	2B	
R305L/R	3069152970	C.F 1.5K ohm ⅓WJ	2C	
R306L/R	3069562970	C.F 5.6K ohm ½WJ	2C	
R307L/R	3069392970	C.F 3.9K ohm 1/5WJ	2C	
R308L/R	3069182970	C.F 1.8K ohm 1/5WJ	2C	
R309L/R	3069203970	C.F 20K ohm 1/5WJ	2B	
R310L/R	3069152970	C.F 1.5K ohm 1/5WJ	2C	
R311L/R	3069104970	C.F 100K ohm 1/5 WJ	2C	
R312L/R	3039271472	M.O 270 ohm 1WJ	2C	
R313L/R	3059278682		2C, 2E	
R314L/R	3059278682	Cement Res 0.27 ohm (3W)	2D, 2E	
R315	3039392472	M.O 3.9K ohm 1WJ	2E	
R316	3069333970 3069220970	C.F 33K ohm 1/4WJ C.F 22 ohm 1/4WJ	2E	
R501L/R		C.F 22 ohm 1/8WJ C.F 22 ohm 1/8WJ	2D, 2E 2D	
R502L/R R502L/R	3069220970 3069220970	C.F 22 ohm 1/5WJ	2D	
R503L/R	3069220970	C.F 22 ohm 1/5WJ	2D	
R901	3039152572	M.O 1.5K ohm 2WJ	2F	
11001	0000102012	INT. O 1. OK OTHER ZAND	21	

Ref.No.	Parts No.	Description	Position	Version
R902	3069332970	C.F 3.3K ohm 1/5WJ	3F	
R903	3069103970	C.F 10K ohm 1/5WJ	3F	
R904 R905	3069470970 3069103970	C.F 47 ohm 1/5WJ	3F 3F	
R906	3069823970	C.F 10K ohm 1/sWJ C.F 82K ohm 1/sWJ	3F	
R907	3069224970	C.F 220K ohm 1/8WJ	2E	
R908L/R	3069332970	C.F 3.3K ohm 1/5 WJ	2B	
R909	3069100472	M.O 10 ohm 1WJ	2E	
R910	3069122970	C.F 1.2K ohm 1/2 WJ	2E	
CAPAC C100	ITORS 3579473530	Ceramic 0.047µF/50WV	1A	
C101L/R	3579220130	Ceramic 22pF/50WV	1A	D
C102L/R	3579680130	Ceramic 68pF/50VW	1A	
C103L/R	3479247971	Elect 4.7µF/50WV	1A	
C104L/R	3479100030	Ceramic 10pF/50WV	1A	
C105L/R C106L/R	3479222530 3479182120	Ceramic 2200pF/50WV Mylar 0.0018µF/50WV	1 A 2 A	
C107L/R	3479222031	Elect 22µF/16WV	1A	
C108L/R	3679562120	Mylar 0.0056µF/50WV	2A	
C109L/R	3479222971	Elect 2.2 pF/50WV	2A	
C110L/R	3679152120	Mylar 0.0015µF/50WV	2A	
C111L/R	3479472871	Elect 0.47μF/50WV	2A	
C112 C113L/R	3409210161 3409210131	Elect 100μF/35WV Elect 100μF/16WV	2A 2A	
C114L/R	3579331130	Ceramic 330pF 50WV	1A	D
C115L/R	3579331130	Ceramic 330pF 50WV	1A	D
C116L/R	3579331130	Ceramic 330pF 50WV	1B	D
C117L/R	3579331130	Ceramic 330pF 50WV	1B	D
C118L/R C119L/R	3579331130 3579331130	Ceramic 330pF 50WV Ceramic 330pF 50WV	1B 1A	D D
C120L/R	3579331130	Ceramic 330pF 50WV	1A	D
C121L/R	3579331130	Ceramic 330pF 50WV	1B	D
C122L/R	3579331130	Ceramic 330pF 50WV	1B	D
C123L/R	3579331130	Ceramic 330pF 50WV	1B	D
C124L/R C125L/R	3479247971 3579331130	Elect 4.7µF/50WV Ceramic 330pF/50WV	3B 3B	
C126L/R	3679104120	Mylar 0.1 µF/50WV	3B	1
C300L/R	3579471130	Ceramic 470PF/50WV	2B	D
C301L/R	3479247871	Elect 4.7µF/50WV	2B	
C302L/R	3579151130	Ceramic 150pF/50WV	2B	
C303L/R	3579150130	Ceramic 15pF/50WV	2B	
C304L/R	3479222031	Elect 22µF/16WV	2C	
C305L/R C306L/R	3479222031 3479222031	Elect 22μF/16WV Elect 22μF/16WV	2C 2C	
C307L/R	3579101130	Ceramic 100pF 50WV	2C	
C308L/R	3579473530	Ceramic 0.047µF/50WV	2C	ľ
C309L/R	3579101130	Ceramic 100pF/50WV	2C, 2D	
C310L/R	3579473530	Ceramic 0.047µF/50WV	2C, 2D	-
C313L/R C314L/R	3409210171 3479222071	Elect 100µF/50WV Elect 22µF/59WV	2E 2E	
C314L/R	3479222071	Elect 22μF/50WV	2E 2E	l
C501L/R	3579473530	Ceramic 0.047µF/50WV	3D	
C901	3509103450	Ceramic 0.01 µF/500WV	3F	D
C902	3509103450	Ceramic 0.01 µF/500WV	3F	D
C903 C904	3509103450 3509103450	Ceramic 0.01 µF/500WV	3F 3F	D
C904 C905	3509103450	Ceramic 0.01 μF/500WV Ceramic 0.01 μF/500WV	3F	
C907	3479210071	Elect 10µF/50WV	3F	
C908	3419547295	Elect 4700µF/50WV	2E	
C909	3419547295	Elect 4700µF/50WV	2F	
C910	3479210071	Elect 10µF/50WV	3F	
C911 C912	3479222071 3479222071	Elect 22μF/50WV Elect 22μF/50WV	3E 3E	
• FUSES				
F501L/R	5502213031	STD 5A/250V	2D	.
F903	5502213031	STD NB 5A/250V	2E	A
F904	5502213031	STD NB 5A/250V	2F	A B
F903 F904	5508212931 5508212931	STD 4A/250V STD 4A/250V	2E 2F	В
F903	5508302934	STD T4A/250V	2E	С
F904	5508302934	STD T 4A/250V	2F	C
F501L/R	5508303034	STD F 5A/250V	2D	C.I.E.F

FRONT BOARD 4002117210

Ref. No.	Parts No.	Description	Version
• DIODES			
LD801	2308220507	LED SLV 56DC	Α
LD802	2308220507	LED SLV 56DC	A
LD804	2308220507	LED SLV 56DC	A
LD805	2208220507	LED SLV 56DC	В
LD806	2308220507	LED SLV 56DC	В
LD807	2308220507	LED SLV 56DC	В
LD808	2308220507	LED SLV 56DC	В
LD809	2308220507	LED SLV 56DC	В
LD810	2308220507	LED SLV 56DC	В
LD811	2308220507	LED SLV 56DC	В
LD803	2308220130	LED SLV 56URC-RD	Ā
• RESISTOR			
R801, R802	3069202970	C.F 2K ohm 1/5 WJ	Α
R803, R804		C.F 2K ohm %WJ	Α
R805, R806	3069202970	C.F 2K ohm ⅓WJ	Α

TONE BOARD 4002117220

Ref. No.	Parts No.	Description	Version
• RESISTO	RS		
R401L/R	3069152970	C.F 1.5K ohm 1/5W	B/A
R402L/R	3069821970	C.F 820 ohm 1/5W	A
R403L/R	3069154970	C.F 150K ohm 1/2W	В
R404L/R	3069393970	C.F 39K ohm 1/5W	Ā
R405L/R	3069473970	C.F 47K ohm 1/5 W	A
R406L/R	3069153970	C.F 15K ohm 1/5W	В
R407L/R	3069332970	C.F 3.3K ohm 1/5W	В
R408L/R	3069224970	C.F 220K ohm 1/5W	Α
• CAPACIT	ORS		
C401L/R	3679472120	Mylar 0.047µF 50WV	Α
C402L/R	3079223120	Mylar 0.022µF 50WV	A
C403L/R	3579309030	Ceramic 3pF 50WV	A
C404L/R	3679683120	Mylar 0.068 µF 50WV	В
C405L/R	3679153120	Mylar 0.015µF 50WV	В

HEAD PHONE BOARD 4002117250

Ref.No.	Parts No	Description	Version
• RESISTOR R601L/R		M.O 270 ohm2WJ	1
• CAPACITO C601L/R		Ceramic 560pF 50WV	D

BIAS BOARD 4002117270

Ref. No.	Parts No.	Description	Version
◆ TRANSIST Q302L/ R		MPS A05	

SPEAKER BOARD 4002117260

Ref.No.	Parts No.	Description	Version
• CAPACIT	ORS		
C701L/R	3579222530	Ceramic 2200pF 50WV	D
C702L/R	3579472530	Ceramic 4700pF 50WV	D

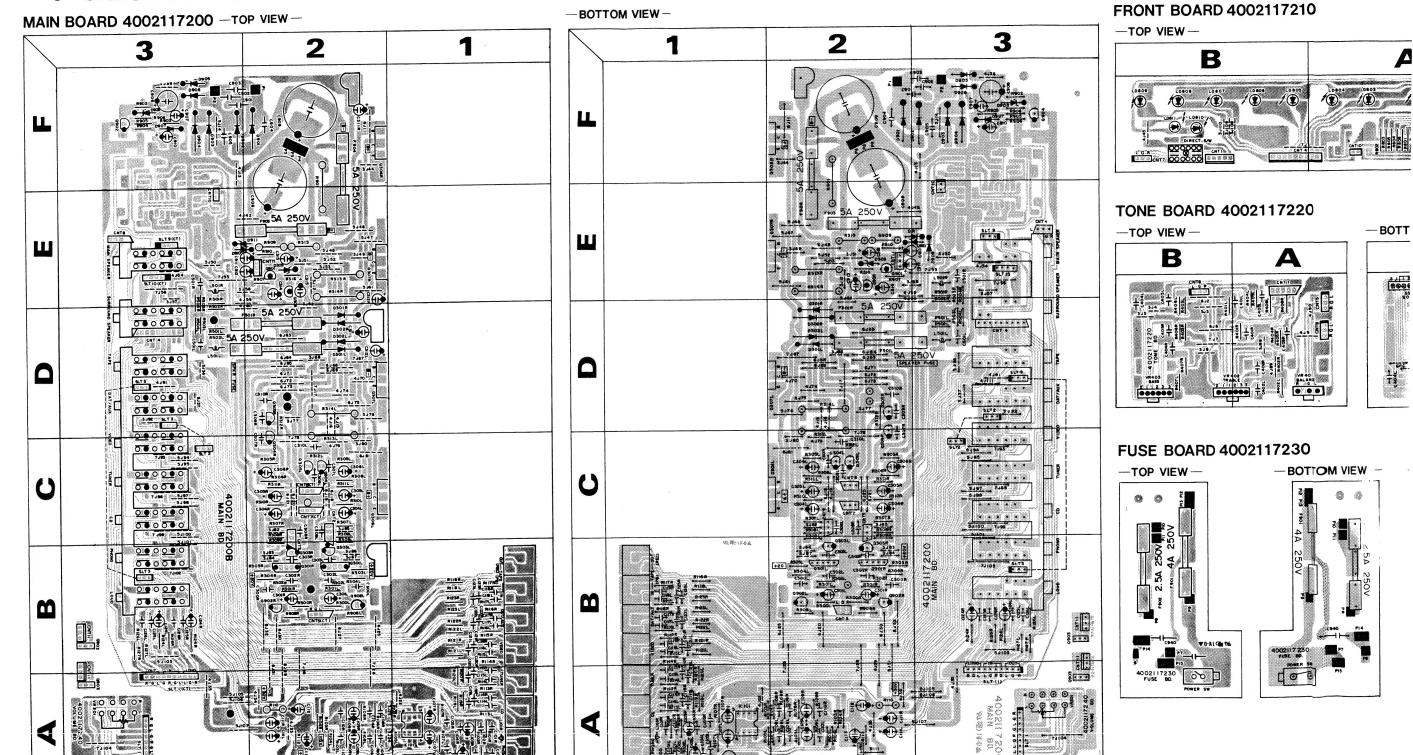
FUSE BOARD 4002117230

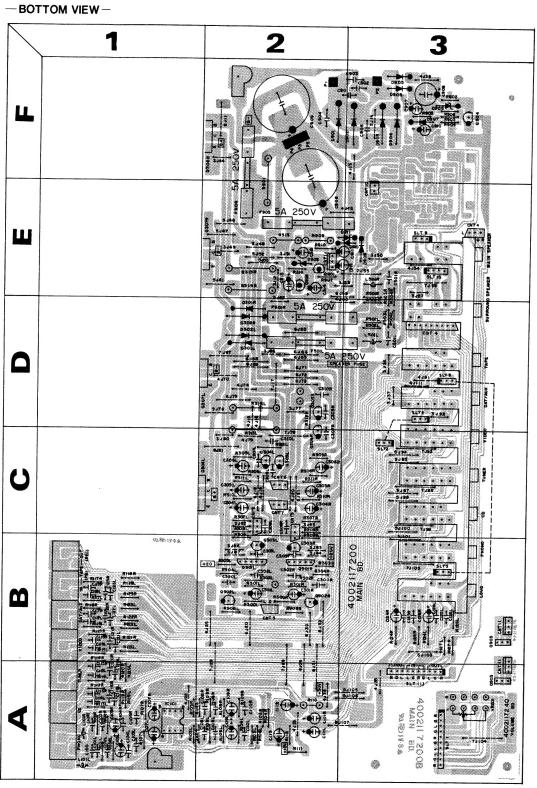
Ref No.	Parts No.	Description	Version
• CAPACIT	OR		
C940	3547472407	Ceramic 0.0047µF/400VAC	
• FUSES			
F901	5508212931	STD NB4A/250V	
F902	5508212531	STD NB2.5A/250V	Α
F902	5508302434	STD T2A/250V	C.D.E.F.

*REMARK

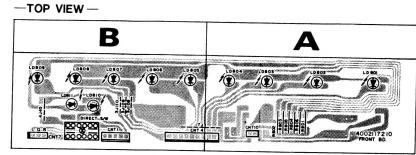
VERSION	COUNTRY	AC INPUT	REMARK (SAFETY)
A	USA/CANADA	120V/10Hz 6	U.L/C.S.A
В	US MILITARY/OTHER COUNTRIES	120V/60Hz, 220V	/50Hz
С	GENERAL EUROPE	220V/50Hz	IEC-65
D	GERMANY	220V/50Hz	FTZ
E	BRITISH/AUSTRALIA	240V/50Hz	BSI/SAA
F	SCANDINABIAN COUNTRY	220V/50Hz	SDNF3

Top & Bottom View of P.C Boards

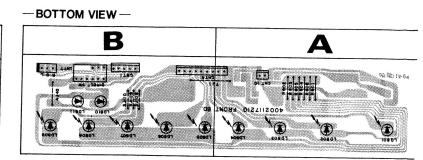




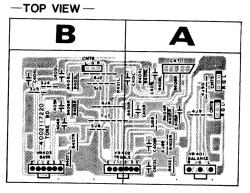
FRONT BOARD 4002117210



-BOTTOM VIEW-



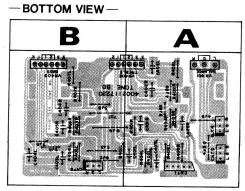
TONE BOARD 4002117220



FUSE BOARD 4002117230

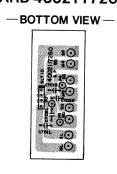
-TOP VIEW-

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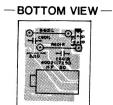
SPEAKER BOARD 4002117260



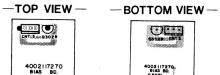


HEAD PHONE BOARD 4002117250





BIAS BOARD 4002117270



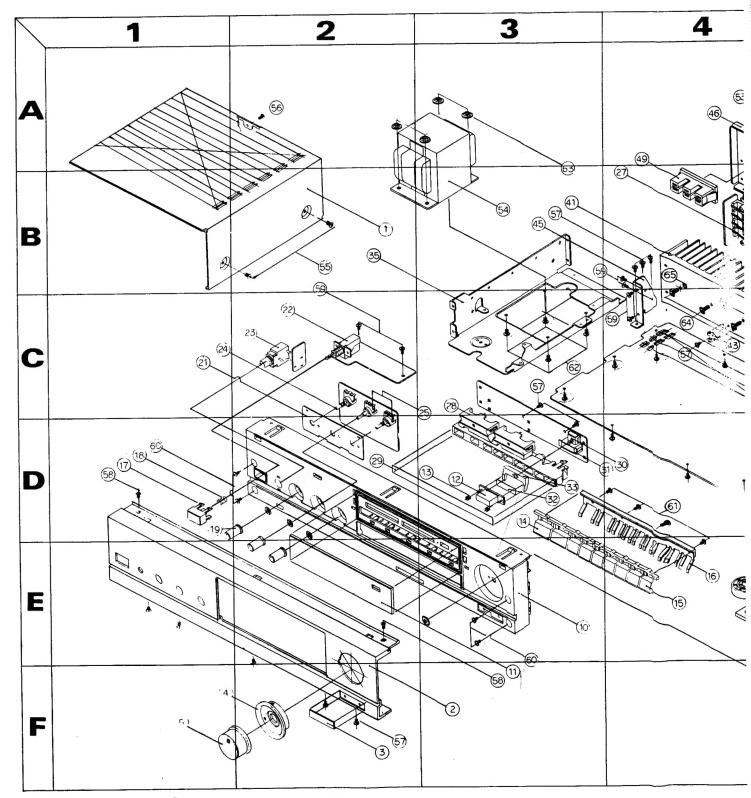
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Mechanical Parts List & Exploded View of Cabinet & Chassis

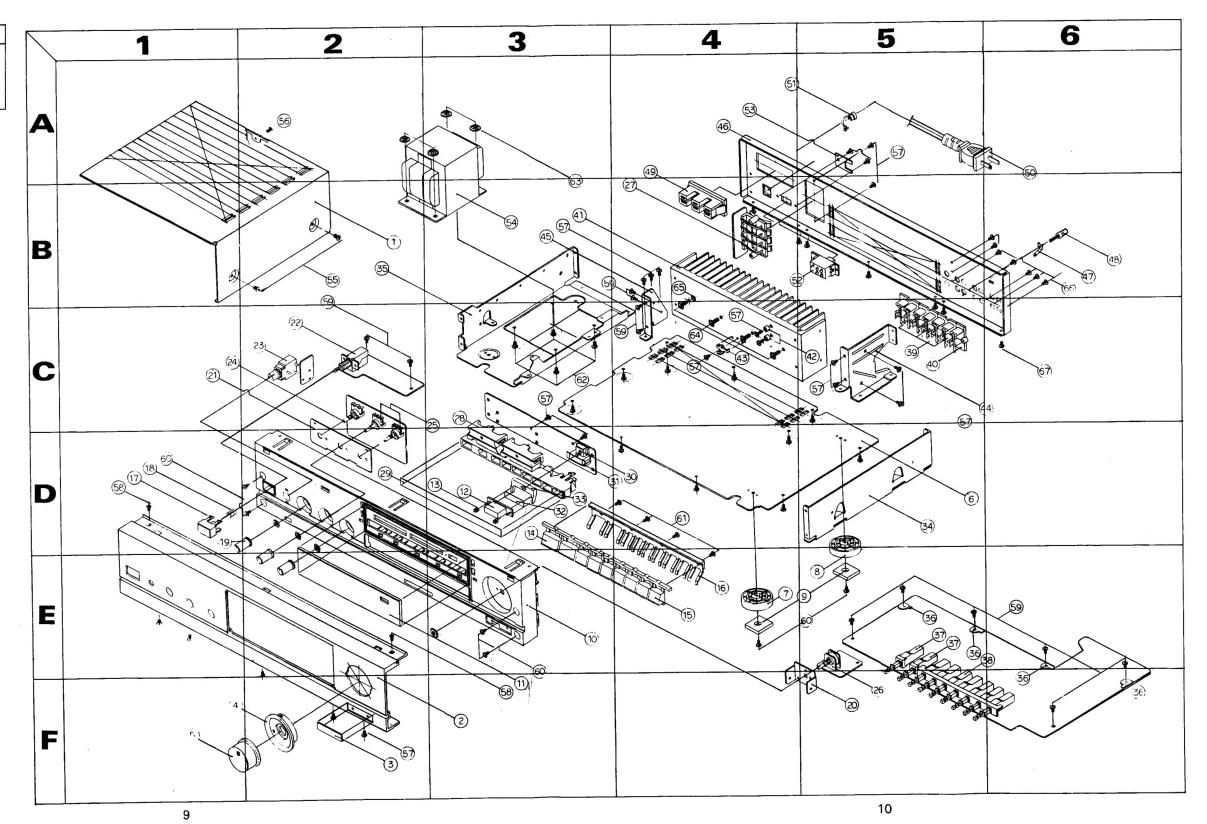
NO.	PARTSNO.	DESCRIPTION	POSITION	Q'TY	VERSION
1	046122015811	COVER TOP	2B	1	
2	048602015011	PANEL FRONT	3F	1	
3	048503019011	BADGE (SHERWOOD) DECORATION RING	2F 1F	1	
5	8523009210 8543013710	KNOB ROTARY	1F	1	
6	6122411710	COVER BOTTOM	5D	1	
7	046035101411	FOOT BASE	4E 5E ·	2	
8	6035101410 6725002110	FOOT BASE CUSHION FOOT	5E	4	
10	048521004111	BODY FRONT	3E	1	
11	048553007411	WIN DOW FUNCTION	3F	1	
12	048545048411 6555006610	KNOB DIRECT SPRING PUSH	3D 3D	2	
14	048543013811		3D 3D	1	
15	048543013911	BOTTON FUNCTION(2)	4E	1	Į.
16	056553800110	ASS'Y SPRING PLATE	4E 1D	1 1	
17	048545048211 6555004340		1D	1	
19	8543015810	KNOB ROTARY (T.T.B)	1D	3	
20	6165127910	SHIELD VR	5F	1	
21	6165128010	SHIELD PLATE(T.T.B) S.W.PUSH	1C 2C	1	
22	4628044410 4438002810	PHONE JACK	2C	1	
24	4438002810 3208049410	VR 100KA X 2	2C 1C 3C	1	
25	3208049510	VR 100KC X 2	3C	2 1	
26 27	3208049610 4408101360	VR 250KSW X 1 TERMINAL SPEAKER(8P)	5F 4B	i	
28	6042001310	HOLDER LED	3C	1	
29	8535020110	DIFFUSER FUNCTION	2D 4D 4D	1	
30	4628049810	SW PUSH (1KEY) REFLECTOR LED	4D 4D	1	
31	8655000710 8535020010	DIFFUSER DIRECT	4D 3D 3D 5D 2B 5E 5E 6E	i	
33	6305003810	SHAFT DIRECT	3D	1	
34	6123618410	FRAME SIDE(R)	5D	1	
35	6122614910 4225005010	FRAME, SIDE(L) GROUND PLATE	28 5F	4	
37	4628049210	SW PUSH (1 KEY)	5E	2	
38	4628049110			1	
39	4438101910	RCA JACK(4P) RCA JACK(2P) H/SINK POWER	5C 5C	3	
40	4438102110 7503008310	H/SINK POWER	3B	1	
42	7015003110	BUSSING	5C	2	
43	6505080610	BKT PCB(B) BKT H/SINK(R)	4C 6C	1	
44	6503010910 6505080110	BKT H/SINK(L)	3B	i	
46	046102021811		4A	1	
	046102021812	CH. BACK	4A	1	B∙ C,F
	046102021813 046102021814	CH. BACK CH. BACK	4A 4A	1	D
	046102021815	CH. BACK	4A	1	E
47	4465100110	GND TERMINAL	6B	1	
48	4465100210	GND SCREW AC OUTLET	6B 4A	1	
49 50	4448100810 4308001410	CORD, AC POWER		i	
"	4308000430	CORD, AC POWER	6A 6A 6A	1	C.D.F
	4308003610 6518000710 6518000110	CORD, AC POWER	6A	1	E
51	6518000710 6518000110	STOPPER, CORD AC STOPPER, CORD AC	4A 4A	i	C.D.E.F
52	4618000410	SW SLIDE VOLTAGE	5B	1	В
53	6515000630	HOLDER VOLTAGE	4A	1	В
54	2828055907	POWER TRANSFORMER POWER TRANSFORMER	4B 3B	1	В
	2828055901 2828051401	POWER TRANSFORMER	3B	1	C,D,F
	2828052801	POWER TRANSFORMER	3 B	1	E
55		SCREW #3 PTC 3×6B	2B 2A	4	
56 57		SCREW #2 PTC 3x6B SCREW #2 BTC 3x8Y	5A ·5C	18	
58		SCREW #2 FTC 3x8Y	1D	2	
59	8129230061	SCREW #2 BTC 3x6Y	2B · 6E	24 9	
60		SCREW #2 WPTC 3x8Y SCREW #2 WPTC 2.6x8Y	1D · 3E 4D	4	
61		SCREW WSAM 4x8Y	3C	4	
63	8209540011	NUT FLUNGE M4Y	3B	4	
64		SCREW HEX M 3x12Y WASHER SPRING 03Y	4C 4B	5 5	
65		SCREW #2 PTC 3×8B	4B 6B	6	
	8119230083	SCREW # 2 PTC 3× 8B	6B	2	В
67	8119130083	SCREW #1 PT 3x8 B	6C	7	

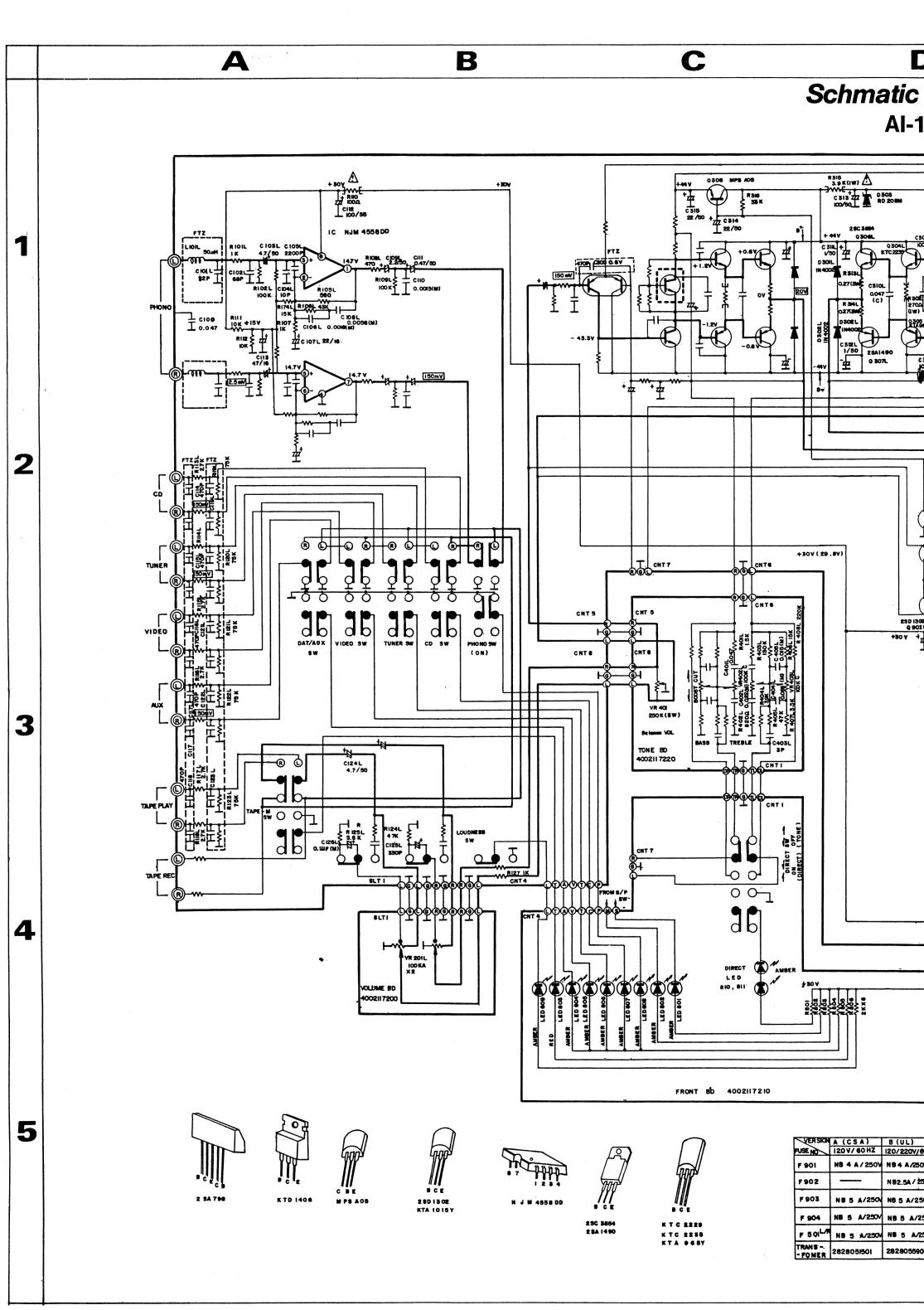
VERSION	COUNTRY	AC INPUT	REMARK (SAFETY)
Α	USA/CANADA	120V/60Hz	UL/CSA
В	US MILITARY/OTHER COUNTRIES	120/60Hz, 220/50	0Hz
č	GENERAL EUROPE	220V/50Hz	IEC-65
Ď	GERMANY	220V/50Hz	FTZ
Ē	AUSTRALIA/BRITISH	240V/50Hz	SAA, BSI
Ē	SCANDINABIAN COUNTRY	/220V/50Hz	S N O E, &,



ew of Cabinet & Chassis

COUNTRY	AC INPUT	REMARK (SAFETY)
CANADA	120V/60Hz	UL/CSA
ITARY/OTHER COUNTRIES		
RAL EUROPE	220V/50Hz	1EC-65
MANY	220V/50Hz	FTZ
RALIA/BRITISH	240V/50Hz	SAA, BSI
IDINABIAN COUNTRY	′220V/50Hz	S N D E &





atic Diagram Al-1110

T 4 A/250V

T 4 A/250

2828051401

NB 5 A/250\

NB 5 A/250V

2828055901

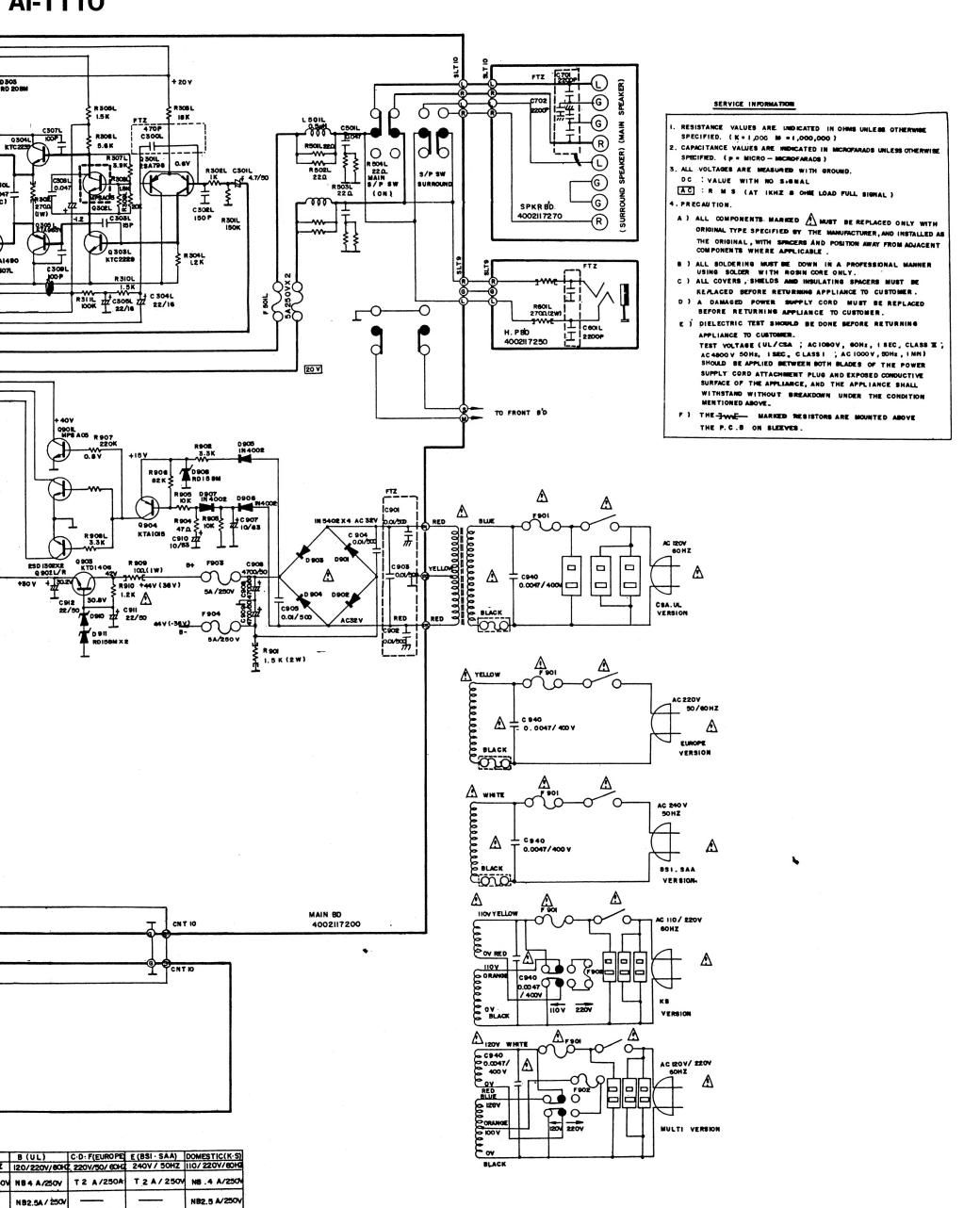
T 4 A/250V

T 4 A/250V

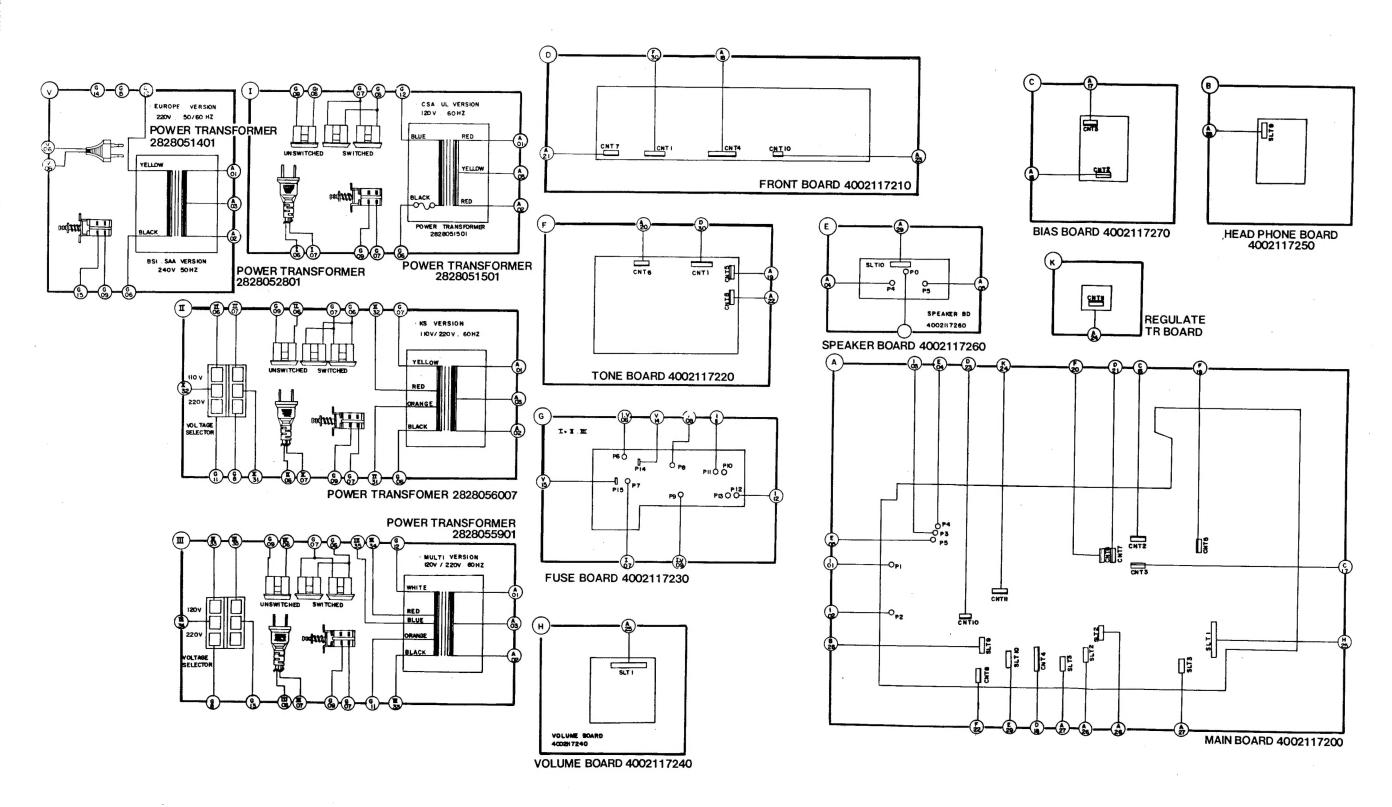
F5 A/250\ 282805280I NB 5 A/250

NB 5 A/250

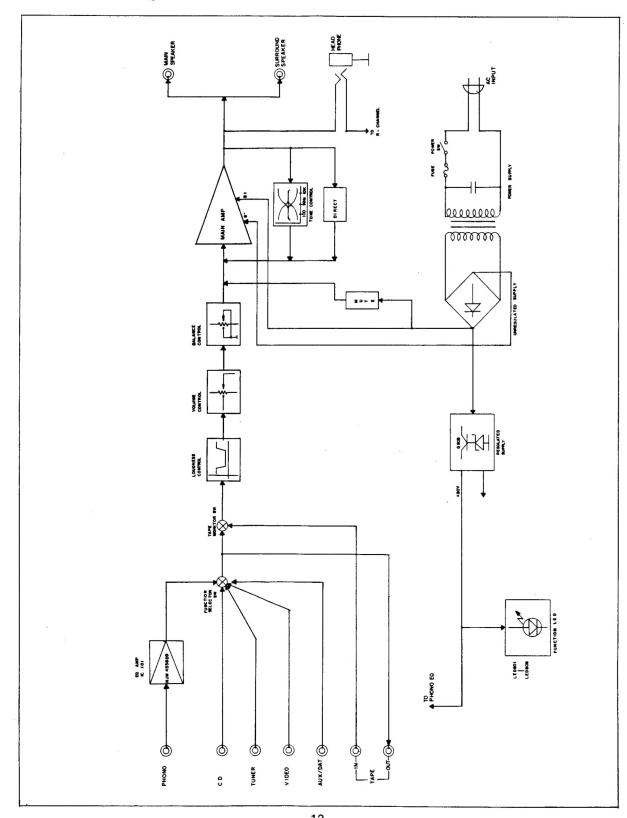
2828056007



Point to Point Wiring Diagram



Block Diagram





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